

U.S. Department of Commerce, Patent and Trademark Office	Serial No.: 10/751,160
	Filing Date: 12/31/03
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Inventor: Vlad J. Novotny
"OPTICAL SWITCHES WITH UNIAXIAL MIRRORS"	Group Art Unit: Unknown
	Examiner Name: Unknown
	Attorney Docket No.: AO-008

U.S. Patent Documents

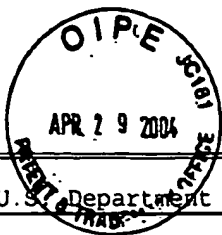
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date, If Appropriate
OR	A	6,301,403 B1	10/09/01	Heanue et al.	385	18	
	B	6,253,001 B1	06/26/01	Storrs T. Hoen	385	17	
	C	6,028,689	02/22/00	Michalicek et al.	359	224	
	D	5,872,880	02/16/99	Ronald S. Maynard	385	88	
	E	6,283,601 B1	09/04/01	Hagelin et al.	359	871	
	F	5,724,123	03/03/98	Tanaka	356	5.01	
	G	6,320,993 B1	11/20/01	Laor	385	16	
	H	6,252,466 B1	06/26/01	J. Patrick Kawamura	331	25	
✓	I	6,097,859	08/01/00	Solgaard et al.	385	17	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

OR	J	NEE, JOCELYN T. et al., "Lightweight, Optically Flat Micromirrors for Fast Beam Steering." Presented at IEEE/LEOS Optical MEMS 2000 conference. August 2000. 2 pages.					
OR	K	LAOR, HERZEL, "Construction and performance of a 576x576 single-stage OXC." LEOS, San Francisco, California, 3 pages. November 8, 1999.					
OR	L	EHRFELD, WOLFGANG et al., "Application of micro- and nanotechnologies for the fabrication of optical devices," SPIE Vol. 3276, page 2 and pages 4-14.					
OR	M	LAOR, HERZEL et al., "PERFORMANCE OF A 576x576 OPTICAL CROSS CONNECT," NFOEC, Chicago, Illinois, pages 1-5. September 26, 1999.					
OR	N	TIEN, NORMAN C. et al., "MEMS Actuators for Silicon Micro-Optical Elements." In MOEMS and Miniaturized Systems. Proceedings of SPIE Vol. 4178. 2000. Pages 256-267.					

Examiner <i>[Signature]</i>	Date Considered <i>9/6/05</i>
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OR	O	US2002/0005976 A1	01/17/02	Behin et al.	359	254	
OR	P	US2002/0171327 A1	11/21/02	Miller et al.	310	309	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

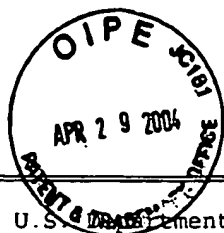
OR	Q	CHEN, YIJIAN, "Control and Shape Design of an Electrically-Damped Comb Drive for Digital Switches." Proceedings of SPIE, Vol. 4178. 2000 - pages 387-394.
OR	R	WALKER, JAMES A., "Topical Review The Future of MEMS in Telecommunications Networks." J. Micromech. Microeng. 10. 2000 - R1- R7. Printed in the UK.
OR	S	BLUMENTHAL, DANIEL J., "Routing Packets with Light." Scientific American. January 2001. Pages 96-99.
OR	T	BISHOP, D.J, "Silicon Micromachines for Lightwave Networks: Can Little Machines Make it Big?" Lucent Technologies, Bell Labs Innovations. February 1999. 83 pages.
OR	U	BISHOP, David, "Silicon Micromachines for Lightwave Networks: The Little Machines That Will Make it Big." SPIE's Optics & Information Systems, Vol. 11, No. 2. December 2000. 1-12 pages.
OR	V	BEZUK, STEVE PH.D., "Flip Chip Challenges." General Manager, Applied Technology Development and Flip Chip Kyocera America, Inc. 02/00 - HD Magazine. 6 pages.
OR	W	BISHOP, DAVID J. et al, "The Rise of Optical Switching." Scientific American. January 2001. Pages 88-95.
	X	
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Examiner

Date Considered

9/6/05

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on	Z	6,580,846 B1	06/17/03	Burroughs et al.	385	16	
I	AA	6,483,962 B1	11/19/02	Novotny	385	18	
J	AB	6,625,341 B1	09/23/03	Novotny	385	18	
K	AC	10/032,198		Novotny			12/20/01
L	AD	09/865,981		Novotny			05/24/01

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

on	AE	CONANT, ROBERT A. et al., "A Flat High-Frequency Scanning Micromirror." Berkeley Sensor & Actuator Center, University of California, Berkeley. June 4-8 2000. Presented at Hilton Head. 4 pages.					
on	AF	DAWSON, J.M. et al., "MEMS Feedback Control Using Through-Wafer Optical Device Monitoring." Proc. Of SPIE Vol. 4178, MOEMS and Miniaturized Systems. September 2000. Pages 221-231.					
on	AG	GRADE, JOHN D. et al., "A Large-Deflection Electrostatic Actuator for Optical Switching Application." Presented at Hilton Head 2000. Pages 1-4.					
OR	AH	LEE, SANGWOO et al., "The Surface/Bulk Micromachining (SBM) Process: A New Method for Fabricating Released MEMS in Single Crystal Silicon." Journal of Microelectromechanical Systems, Vol. 8, No.4, December 1999. Pages 409-416.					
OR	AI	MILANOVIC, VELJKO, "Optical MEMS for Optical Communications - Trends and Developments." Adriatic Research Institute, 12-20-01. Pages 2-6.					
	AJ						
	AK						

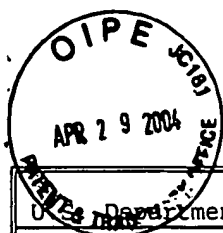
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ON	AL	6,301,402 B1	10/09/01	Bhalla et al.	385	16	
	AM	6,411,751 B1	06/25/02	Giles et al.	385	16	
	AN	6,453,083 B1	09/17/02	Husain et al.	385	17	
	AO	6,456,751 B1	09/24/02	Bowers et al.	385	16	
	AP	US2002/0122619 A1	09/05/02	Sandler et al.	385	17	
	AQ	US2002/0186918 A1	12/12/02	Burroughs	385	18	

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1

of 1

Complete if Known

Application Number 10/751,160

Filing Date 12/31/2003

First Named Inventor Vlad Novotny

Art Unit 2874

Examiner Name Unknown

Attorney Docket Number AO-008

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
OK	1	US- 6,337,760 B1	01/08/2002	Huibers et al.	
	2	US- 6,430,331 B1	08/06/2002	Hagelin et al.	
	3	US- 6,697,547 B2	02/24/2004	Walter et al.	
	4	US- 6,542,665 B2	04/01/2003	Reed et al.	
	5	US- 6,172,817 B1	01/09/2001	Senapati et al.	
	6	US- 5,841,917	11/24/1998	Jungerman et al.	
	7	US- 6,549,691 B1	04/15/2003	Street et al.	
	8	US- 6,628,857 B1	09/30/2003	Bonadeo et al.	
	9	US- 6,707,594 B2	03/16/2004	Holmes	
	10	US- 6,760,505 B1	07/06/2004	Street et al.	
	11	US- 6,445,844 B1	09/03/2002	Neukermans et al.	
	12	US- 5,724,015	03/03/1998	Tai et al.	
	13	US- 5,506,394	04/09/1996	Plesko	
		US-			
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T*
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

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